TROUBLESHOOTING

MOTOR WON'T START:
- CHECK VOLTAGE AT TERMINALS WITH VOLTMETER.
  - IF Ø VOLTS:
    - FUSE/ BREAKER → REPLACE FUSE/ RESET BREAKER.
    - TRIPPED GFI → RESET GFI.
    - DEFECTIVE EXTERNAL SWITCH → CHECK SWITCH SETTINGS AND CONNECTIONS.
  - IF LOW VOLTS: → CALL ELECTRICIAN
  - IF PROPER VOLTAGE:
    - INCORRECT OR LOOSE CONNECTIONS → INSURE WIRING CIRCUIT AGREES WITH DIAGRAM AND LEADS ARE TIGHT.
    - THERMAL PROTECTOR TRIPPED → ALLOW MOTOR TO COOL AND RESTART.
    - WINDING SWITCH OR CAPACITOR FAILURE → SEE AN AUTHORIZED MOTOR SERVICE CENTER.

MOTOR HUMS WON'T START:
- CHECK VOLTAGE AT TERMINAL WITH VOLTMETER.
  - IF PROPER VOLTAGE:
    - TIGHT PUMP → TAKE APART PUMP, LOOK FOR SIGNS OF RUBBING.
    - SEIZED OR TIGHT MOTOR → TAKE APART PUMP, TURN MOTOR BY HAND. SEE AN AUTHORIZED MOTOR SERVICE CENTER.
    - WINDING SWITCH OR CAPACITOR FAILURE → SEE AN AUTHORIZED MOTOR SERVICE CENTER.
  - IF VOLTAGE IS NOT WITHIN 10% OF NAMEPLATE, CALL ELECTRICIAN.

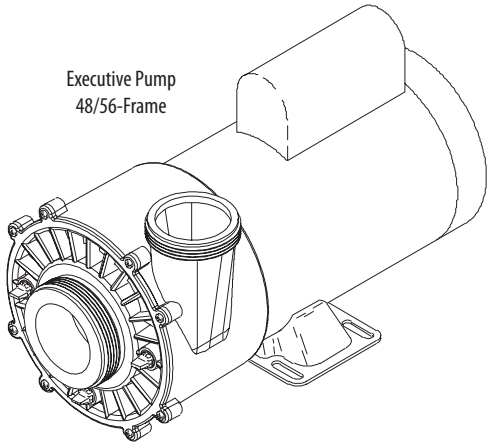
MOTOR IS NOISY:
- CHECK TO SEE THAT MOUNTING IS SECURE:
  - LOOSE MOUNTING → TIGHTEN MOUNTING.
- BENT SHAFT: → SEE AN AUTHORIZED MOTOR SERVICE CENTER.
- DISASSEMBLE PUMP AND RUN MOTOR SEPARATE TO DETERMINE WHETHER MOTOR NOISE IS ACCEPTABLE:
  - BEARING NOISE OR ROTOR RUB → SEE AN AUTHORIZED MOTOR SERVICE CENTER.

MOTOR RUNS, THEN STOPS:
- CHECK FOR MOTOR OVERLOAD BY CHECKING AMP DRAW AT MOTOR TERMINAL WITH AMMETER, AMP DRAW SHOULD BE WITHIN 10% OF NAMEPLATE.
  - IF MOTOR IS NOT OVERLOADED:
    - TRIPPED BREAKER → RESET BREAKER.
    - INADEQUATE VENTILATION → INCREASE VENTILATION.
    - INCORRECT LINE VOLTAGE → CHECK VOLTAGE, IF INCORRECT CALL AN ELECTRICIAN.
    - INCORRECT WIRING → INSURE THAT WIRING CIRCUIT AND WIRING DIAGRAM ARE THE SAME.
  - IF MOTOR IS OVERLOADED:
    - INCORRECT VOLTAGE → CHECK VOLTAGE, IF INCORRECT, CALL AN ELECTRICIAN.
    - INCORRECT WIRING → INSURE THAT WIRING CIRCUIT AND WIRING DIAGRAM ARE THE SAME.
    - PUMP BINDING → TAKE APART PUMP, LOOK FOR SIGNS OF RUBBING.
    - MOTOR BINDING → IF MOTOR WILL NOT TURN BY ITSELF SEE AN AUTHORIZED MOTOR SERVICE CENTER.

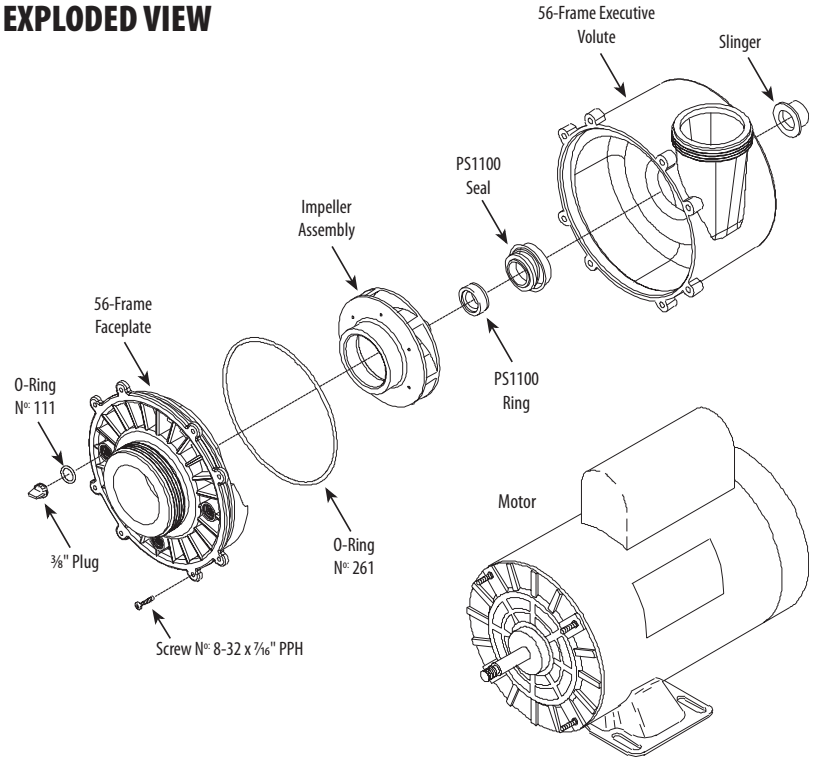
PUMP RUNS, NO FLOW:
- CHECK SHUT OFF VALVES:
  - VALVES CLOSED → OPEN VALVES.
- CHECK TO SEE THAT PUMP IS BELOW WATER LEVEL:
  - PUMP ABOVE WATER LEVEL → REPLUMB PUMP BELOW WATER LEVEL.
- CHECK SHUT OFF VALVES:
  - AIR LOCK → REMOVE DRAIN PLUG UNTIL WATER FLOWS FROM PUMP. REPLACE DRAIN PLUG AND START PUMP.

PUMP RUNS, NOT ENOUGH FLOW:
- VISIBLE AIR BUBBLES IN RETURN LINE:
  - LEAK IN SUCTION PLUMBING → REPLUMB PUMP BELOW WATER LEVEL.
- CHECK TO SEE THAT VALVES ARE COMPLETELY OPEN:
  - PARTIALLY CLOSED VALVES → OPEN VALVES.
- CHECK FILTER PRESSURE GAUGE:
  - DIRTY IMPELLER OR FILTER → CLEAN FILTER OR IMPELLER.

ASSEMBLY DRAWING



EXPLODED VIEW



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